WHAT IS CLAIMED IS:

1. A shift control apparatus for a vehicular automatic transmission, comprising:

a fuel cut apparatus which performs a fuel cut in which a supply of fuel to an engine is cut off when an engine speed exceeds a predetermined value during deceleration of a vehicle;

an automatic transmission in which a gearshift is achieved with a clutch-to-clutch downshift in which a hydraulic friction device to be released is released and a hydraulic friction device to be applied is applied; and

a controller which corrects, through learning control, an apply pressure of at least one of the hydraulic friction devices to be operated for the clutch-to-clutch downshift such that an amount of drop in a rotational speed of an input shaft of the automatic transmission increases when that amount of drop is less than a predetermined value during the clutch-to-clutch downshift.

2. The shift control apparatus for a vehicular automatic transmission according to claim 1, wherein, when a command for the clutch-to-clutch downshift is output, the controller maintains the apply pressure of the hydraulic friction device to be released for a predetermined holding time at a predetermined holding pressure which is set lower than a base pressure of the apply pressure and higher than a pressure at which the hydraulic friction device to be released starts to release, and then smoothly decreases the apply pressure of the hydraulic friction device to be released at a constant rate, while increasing the apply pressure of the hydraulic friction device to be applied so that the rotational speed of the input shaft smoothly increases at a constant rate.

3. The shift control apparatus for a vehicular automatic transmission according to claim 2, wherein the controller corrects, through learning, the holding time of the holding pressure of the hydraulic friction device to be released so as to decrease when the amount of drop in the rotational speed of the input shaft is less than the predetermined value.

4. The shift control apparatus for a vehicular automatic transmission according to claim 3, wherein, when the amount of drop in the rotational speed of the input shaft is less than the predetermined value, the controller obtains a time at which to start decreasing pressure from the holding pressure of the hydraulic friction device to be released in the next clutch-to-clutch downshift by subtracting a learning correction value from the time at which to start decreasing pressure from the holding pressure of the hydraulic friction device to be released in the last clutch-to-clutch downshift.

5. The shift control apparatus for a vehicular automatic transmission according to claim 3, wherein, when it has been determined that the amount of drop in the rotational speed in the input shaft of the automatic transmission is less than the predetermined value, the controller corrects the holding time of the holding pressure of the hydraulic friction device to be released through learning so as to be shorter when it has been determined that the amount of drop is equal to, or less than, a zero determination value than when it has been determined that the amount of drop is not equal to, or less than, the zero determination value by using a larger learning correction value.

6. The shift control apparatus for a vehicular automatic transmission according to claim 2, wherein, when it has been determined that the amount of drop in the rotational speed in the input shaft of the automatic transmission is less than the predetermined value, the controller corrects the holding time of the holding pressure of the hydraulic friction device to be released through learning so as to be shorter when it has been determined that the amount of drop is equal to, or less than, than a zero determination value than when it has been determined that the amount of drop is not equal to, or less than, the zero determination value, by using a larger learning correction value.

7. A shift control method for a vehicular automatic transmission provided with a fuel cut apparatus which performs a fuel cut in which a supply of fuel to an engine is cut off when an engine speed exceeds a predetermined value during deceleration of a vehicle, and an automatic transmission in which a gearshift is achieved with a clutch-to-clutch downshift in which a hydraulic friction device to be

released is released and a hydraulic friction device to be applied is applied, the shift control method comprising the step of:

correcting, through learning control, an apply pressure of at least one of the hydraulic friction devices to be operated for the clutch-to-clutch downshift such that an amount of drop in a rotational speed of an input shaft of the automatic transmission increases when that amount of drop is less than a predetermined value during the clutch-to-clutch downshift.

8. The shift control method for a vehicular automatic transmission according to claim 7, further comprising the step of:

when a command for the clutch-to-clutch downshift is output, maintaining the apply pressure of the hydraulic friction device to be released for a predetermined holding time at a predetermined holding pressure which is set lower than a base pressure of the apply pressure and higher than a pressure at which the hydraulic friction device to be released starts to release, and then smoothly decreasing the apply pressure of the hydraulic friction device to be released at a constant rate, while increasing the apply pressure of the hydraulic friction device to be applied so that the rotational speed of the input shaft smoothly increases at a constant rate.

9. The shift control method for a vehicular automatic transmission according to claim 8, wherein, the holding time of the holding pressure of the hydraulic friction device to be released is corrected through learning so as to increase when the amount of drop in the rotational speed of the input shaft is less than the predetermined value.

10. The shift control method for a vehicular automatic transmission according to claim 9, wherein, when the amount of drop in the rotational speed of the input shaft of the automatic transmission is less than the predetermined value, a time at which to start decreasing pressure from the holding pressure of the hydraulic friction device to be released in the next clutch-to-clutch downshift is obtained by subtracting a learning correction value from the time at which to start decreasing pressure from the holding pressure of the hydraulic friction device to be released in the last clutch-to-clutch downshift.

11. The shift control method for a vehicular automatic transmission according to claim 9, wherein, when it has been determined that the amount of drop in the rotational speed in the input shaft of the automatic transmission is less than the predetermined value, the holding time of the holding pressure of the hydraulic friction device to be released is corrected through learning so as to be shorter when it has been determined that the amount of drop is equal to, or less than, than a zero determination value than when it has been determined that the amount of drop is not equal to, or less than, the zero determination value by using a larger learning correction value.

12. The shift control method for a vehicular automatic transmission according to claim 8, wherein, when it has been determined that the amount of drop in the rotational speed in the input shaft of the automatic transmission is less than the predetermined value, the holding time of the holding pressure of the hydraulic friction device to be released is corrected through learning so as to be shorter when it has been determined that the amount of drop is equal to, or less than, than a zero determination value than when it has been determined that the amount of drop is not equal to, or less than, the zero determination value by using a larger learning correction value.